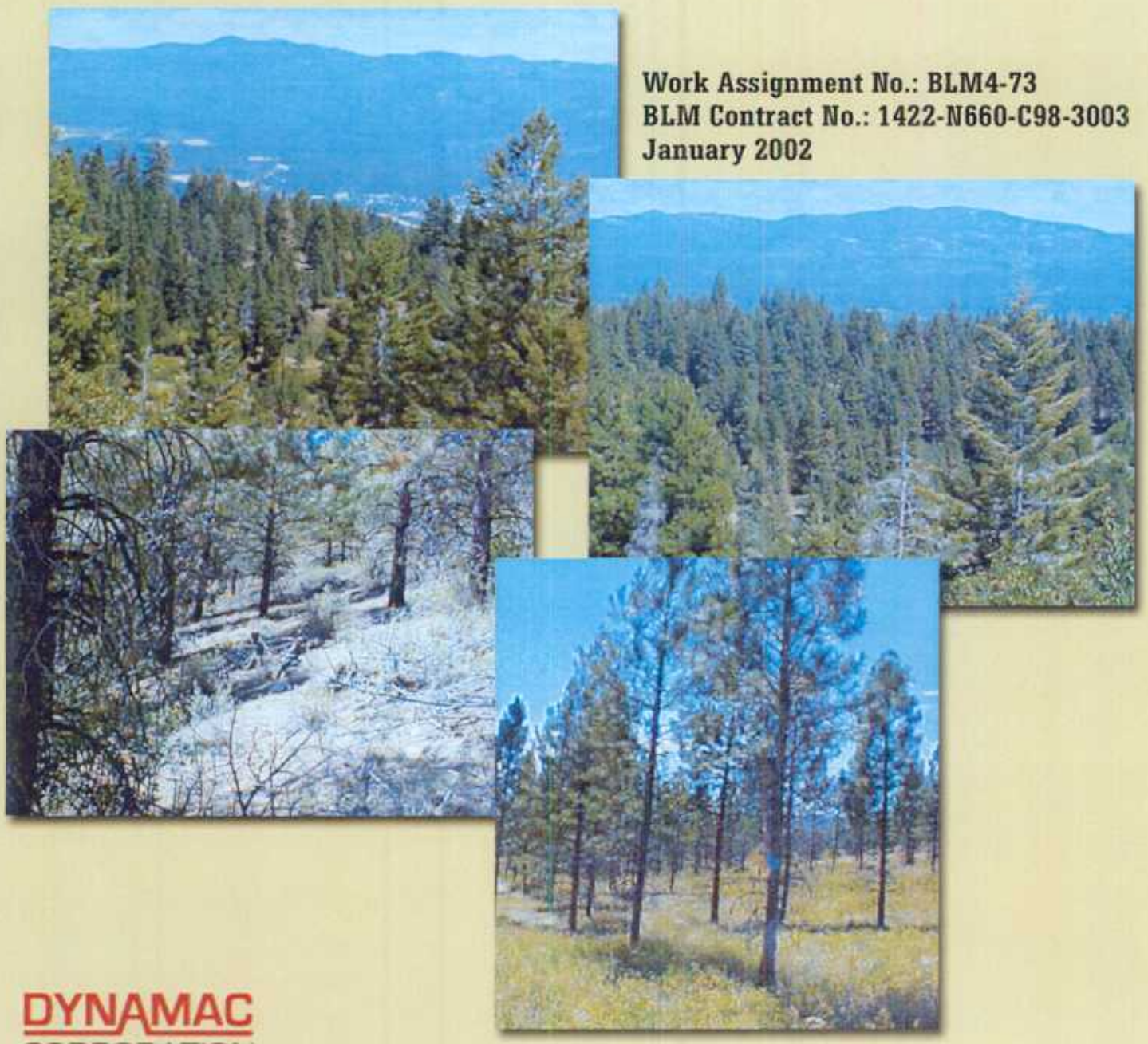
WILDLAND-URBAN INTERFACE COMMUNITIES-AT-RISK PROGRAM

Final Mitigation Plan Report
Lower Snake River District
Idaho City Assessment Area



Work Assignment No.: BLM4-73
BLM Contract No.: 1422-N660-C98-3003
January 2002

DYNAMAC
CORPORATION

FINAL

WILDLAND-URBAN INTERFACE, COMMUNITIES-AT-RISK MITIGATION REPORT

LOWER SNAKE RIVER DISTRICT
IDAHO CITY ASSESSMENT AREA

Prepared for:

U.S. Department of Interior
Bureau of Land Management
Lower Snake River District
Boise, Idaho

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APPENDIX – MAPS

ACRONYMS

BLM	Bureau of Land Management
CRP	Conservation Reserve Program
GIFF	Gateway Interagency Fire Fund
IDL	Idaho Department of Lands
NFPA	National Fire Protection Association
NRCS	National Resource Conservation Service
NWCG	National Wildfire Coordination Group
OHV	Off Highway Vehicle
SCA	Student Conservation Association

1.0 EXECUTIVE SUMMARY

During the 2000 fire season more than 6.8 million acres of public and private lands burned, resulting in loss of property, damage to resources, and disruption of community services. Many of these fires occurred in wildland-urban interface areas and exceeded fire suppression capabilities. To reduce the risk of fire in the wildland-urban interface, the President of the United States directed the Secretaries of the Departments of Agriculture and the Interior to increase federal investments in projects to reduce the risk of wildfire in the wildland-urban interface. To this end, the Bureau of Land Management (BLM), Lower Snake River District is currently in the process of forming partnerships with local governments to plan fuels reduction treatments and other mitigation measures targeted at the wildland-urban interface in the vicinity of Federal lands. These partnerships are indicative of a shared responsibility to reduce wildland fire risks to communities.

The wildland-urban interface occurs where human structures meet or intermix with wildland vegetation. In certain situations, specific actions such as fuels reduction around communities, forestland and rangeland restoration, infrastructure improvements, and public education and outreach may reduce the risk of catastrophic fire in the wildland-urban interface. To this end, the BLM implemented the Communities-at-Risk, Wildland-Urban Interface Program. The program seeks to reduce the hazard of wildland fires to communities through public outreach, the reduction or prevention of fuel build-up, and increasing the fire protection capabilities of communities. The Idaho City community was selected by the BLM to assess the hazard of wildland fire and to identify specific actions that may reduce the risk.

Dynamac Corporation was contracted to support the BLM in their assessment of wildfire risk to the Idaho City community in the wildland-urban interface. Dynamac scientists conducted fuel surveys by categorizing the vegetation, slope, and aspect of the land in the Idaho City assessment area. The risk of wildland fire to homes, structures, and cultural resources on private land was also evaluated according to building materials, the presence of survivable space, road access, and the response time of the local fire department. Dynamac assessed the adequacy of the community's service infrastructure (including roads, water supplies, and fire fighting equipment) by systematic observation, and by interviewing community officials and fire prevention personnel. A community open house was held to disseminate information about the Communities-at-Risk, Wildland-Urban Interface Program to citizens, to afford them the opportunity to identify resources that are of value to the community, and to have them identify

actions that may reduce the risk of wildland fire. The information gathered from the fuel surveys, structural surveys, interviews, infrastructure assessments, and community profile was integrated into two reports: a hazard assessment report and a mitigation report. The following actions items were identified to reduce the hazard of wildfire in the Idaho City assessment area based on the synthesis of the two reports:

- Construct firebreaks at specific locations and reduce the buildup of flammable fuels throughout the assessment area.
- Develop and maintain water storage tanks at specific locations in Idaho City to reduce the time needed to refill tanker trucks.
- Develop an ongoing education and outreach program throughout the assessment area to encourage firewise practices.

2.0 GOALS AND OBJECTIVES

The goals and objectives of the Idaho City wildfire hazard assessment and mitigation plan are to evaluate the hazards of wildland fire within the assessment area and then identify specific actions that could reduce the risks. The objectives are to decrease the chances of wildfire spreading from BLM lands onto private lands while, correspondingly, decreasing the risk of wildfire spreading from private lands onto BLM lands; and to protect structures and other valued resources in the community.

3.0 BACKGROUND

Wildland fire is an integral component of many forest and rangeland ecosystems. In the conterminous United States before European settlement, an estimated 145 million acres were annually consumed by wildfire. In comparison, only about 14 million acres are currently burned annually due to increased agriculture, urbanization, habitat fragmentation, and fire suppression programs. This change from the historical fire regime to the present day has caused a shift in the native vegetation composition and structure of fire-prone ecosystems, such as some forests and rangelands, resulting in a dangerously high accumulation of fuels. As a result, when wildland fires do occur, they may burn larger and hotter than those in the past and pose an increased risk to human welfare and ecological integrity.

The hazard of wildland fires is compounded by the increasing occurrence of human structures and activities in fire-prone ecosystems. The wildland-urban interface occurs where human structures meet or intermix with wildland vegetation. In certain situations, specific actions such as fuels reduction around communities, forestland and rangeland restoration, infrastructure improvements, and public outreach may reduce the risk of catastrophic fire in the wildland-urban interface. To this end, the BLM implemented the Communities-at-Risk, Wildland-Urban Interface Program. The program seeks to reduce the hazard of wildland fires to communities through public education and outreach, the reduction or prevention of fuel build-up, and increasing the fire protection capabilities of communities. The Idaho City community was selected by the BLM to assess the hazard of wildland fire and to identify specific actions that may reduce the risk.

4.0 EXISTING SITUATION

Idaho City is a historic mining town that dates back to the 1860s, when gold was discovered in the surrounding mountains. Many of the structures in town are listed on the National Register of Historic Places. Historic buildings, mining structures, tailings, and mine shafts characterize the historical mining district. Idaho City is composed of numerous historic structures that include homes, a hotel, a cemetery, and a school. In addition to the historic structures, there are many new structures that have recently been completed in the assessment area or are planned in several new subdivisions, such as the Star Gulch, Ivydale, Mountain Meadow and Elk Creek subdivisions. In addition, there are new structures intermixed with older structures along Highway 21. Idaho City is fast becoming a rural bedroom community and recreation area for Boise. The U.S. Forest Service (USFS) maintains a research station, ponderosa pine tree seed orchard, and firefighting facilities in the assessment area. The area for the wildfire hazard assessment consists of portions of townships T05N R05E and T06N R05E (**Map 1**).

The Idaho City assessment area is located approximately 45 miles northeast of Boise along Highway 21 in Boise County. The town of Idaho City can be reached by taking Highway 21 from Boise. Idaho City can also be reached by taking forest roads from Horseshoe Bend and Garden Valley.

The elevation of Idaho City is 3,906 feet above mean sea level (amsl) and it is situated in a scenic mountainous valley. The general elevation ranges from 4,500 to 6,000 feet amsl. The Mores Creek Summit, northeast of Idaho City, has an elevation of 6,118 feet. The Warm Springs

Point, located southwest of Idaho City, has an elevation of 6,054 feet. The terrain is rugged and difficult to assess because of narrow and steep 4-wheel drive roads. The soils are poorly developed, well-drained, and do not readily erode. Soil disturbance is common from former mining activities, especially along streams. Current land uses include timber production, recreation, hunting, hiking, camping, cross-country skiing, sightseeing and 4-wheel driving. Mores Creek, with numerous small ponds and wetlands, is the dominant body of open water. It is riddled with old mine tailings. There are numerous other small creeks and gulches widespread throughout the assessment area.

In the late 1800s and early 1900s, the hills surrounding Idaho City were nearly stripped of trees because the lumber was used for fuel, building construction, and mining supports. Currently, ponderosa pine forests are the dominant vegetation throughout the assessment area. Mixed conifer forests with Douglas fir and subalpine fir occur at the high elevations. Aspen, choke cherry, willow, and other riparian species occur along the creeks and on mesic sites. Bitterbrush is common throughout the assessment area. Many of the ponderosa pine stands are overstocked and have multiple canopy layers. The overstocked stands pose a wildfire risk within the Idaho City assessment area. Lightning and human-caused fires can easily occur when there is a buildup of hazardous fuels in forests communities. However, wildlife habitats are diverse because of the different forest communities.

The climate of the Idaho City area is characterized by hot, dry summers with average daily high temperatures reaching 88" F in July, and average daily summertime lows of 44.6" F. Winter months are typically cool, with average daily temperatures from November to March ranging from the high 40's to the low 10's" F. Precipitation is typically low with an average annual precipitation of 23.86 inches. Most precipitation arrives during the November to January time period as snowfall and substantial accumulation can occur.

The dominant hazardous fuels in the assessment area are the overstocked ponderosa pine stands that occur throughout the assessment area, and the mixed conifer stands that occur at the higher elevations. In addition, ponderosa pine and Douglas fir trees and shrubs growing within the town also present a hazardous fire situation.

The Hazard Assessment Report for the Idaho City assessment area presents and summarizes data for fuel and terrain conditions; these data can be summarized as follows:

- **Slope:** Eighty percent of the survey sites occurred on slopes that were less than 10 percent (Class A). The remaining sites occurred on moderate slopes (Class B).
- **Aspect:** Eighty percent of the sites had southern exposures (Class C) while 20 percent were on east (or relatively level) facing slopes (Class B).
- **Elevation:** The elevations for all of the survey sites were between 3,500 and 5,500 feet amsl (Class B).
- **Vegetation Type:** Sixty percent of the survey sites had a moderate vegetation rating (Class B) while the remaining 40 percent had a low hazard vegetation rating (Class A).
- **Fuel Type:** Sixty percent of the fuel survey points had heavy fuels (Class C), the remaining forty percent had moderate fuels (Class B).
- **Fuel Density:** Sixty percent of the sites had a broken moderate fuel bed (Class B). The remaining sites had continuous fuel density (Class C).
- **Fuel Bed Depth:** Eighty percent of the sites had a fuel bed depth of greater than three feet (Class C), while twenty percent had a fuel depth between one and three feet (Class B).

A second component of the Hazard Assessment was to characterize structures in the assessment area, for structure density, building materials, proximity to fuels, presence of a survivable space, and roads/accessibility. Twenty-seven sections were evaluated and 14 of those sections contained structures such as homes or buildings that occurred on private land within one-mile of public land. The majority of structures were in Idaho City. New structures occurred throughout the assessment area at a low density and at times intermixed with older structures. Highway 21, the Ponderosa Pine Scenic Route, is a well-maintained two-lane road that runs diagonally from the southwest corner to the northeast corner the length of the assessment area. The main points of the structure survey are as follows:

- **Structure Density**: Ninety-six percent of the sections had less than one structure per 10 acres (Class C). The section that contained Idaho City has about 200 structures (Class A).
- **Proximity to Structures:** One hundred percent of the sections that contained structures were rated as a high hazard because wildland fuels were within 40 feet of the structures (Class C).
- **Predominant Building Materials:** Eighty-six percent of the sections with structures were rated as having homes with fire resistance roof and/or siding (Class A). Fourteen percent of the sections had structures with non-fire safe materials (Class C). Even though many of the structures were roofed with metal or other fire retardant material, may were constructed of wooden siding that appeared not to be fire retardant.

- **Survivable Space:** Seven percent of the sections with structures were rated as having homes with 10 to 50 percent survivable space (Class B). Ninety-three percent contained homes with less than 10 percent having survival space (Class C).
- **Roads:** Four percent of the sections had predominately maintained two lane roads with no shoulders (Class A), while 11 percent of the sections had predominately roads that are maintained with some narrow roads (Class B). Eight-five percent of the sections had predominately narrow, single lane roads that are not maintained and many of these are 4-wheel drive roads (Class C).
- **Response Time:** Nineteen percent of the sections have a response time of less than 20 minutes to the interface area (Class A). These sections are close to Idaho City. Twenty-six percent of the sections had a response time of between 20 to 40 minutes (Class B). These sections mainly occur along the Ponderosa Scenic Route. Fifty-five percent of the sections had a response time of greater than 40 minutes mainly because of the narrow, steep roads found within them and distance from Idaho City (Class C).
- **Access:** Eleven percent of the sections had roads with multiple entrances and exits that would accommodate fire truck turnarounds (Class A). These sections included Idaho City and the immediate vicinity. Seven percent of the sections have limited access routes with only two ways in and out or may have moderate road grades (Class B). The remaining sections have narrow, single lane, or steep road grades (Class C), of which many are 4-wheel drive trails.

The data from the fuels hazard assessment are also graphically depicted in Figures 1 and 2. The charts depict the percentage of fuel assessment points, based on a total of five assessment points surveyed, that received a high, moderate, or low hazard ranking. The percentages of assessment points for hazards to structures are graphically depicted in Figure 3. It should be noted that for the structure density, roads, response time, and access attributes, analyses were based on the assessment of 27 sections that contained private lands within one mile of public lands. The attributes pertaining to proximity to structures, predominant building materials, and survivable space were analyzed based only on the 14 sections where structures were observed (13 section did not have structures). Map 2 shows an overlay of data for the sections with highest risk in terms of fuel with areas of low structure density.

Figure 1: Idaho City Fuel Hazard Assessment Results (Topography)

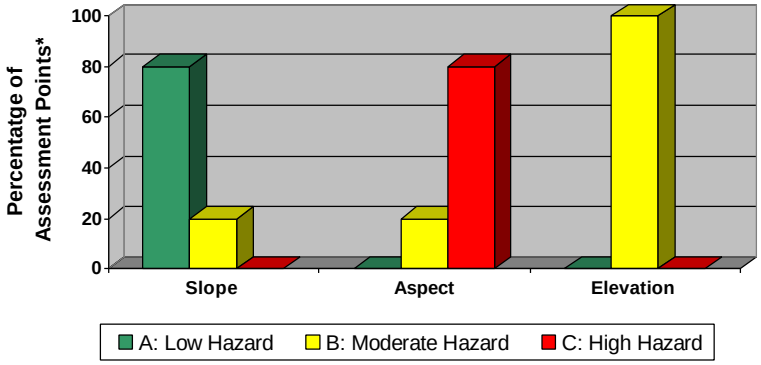


Figure 2: Idaho City Fuel Hazard Assessment Results (Fuels)

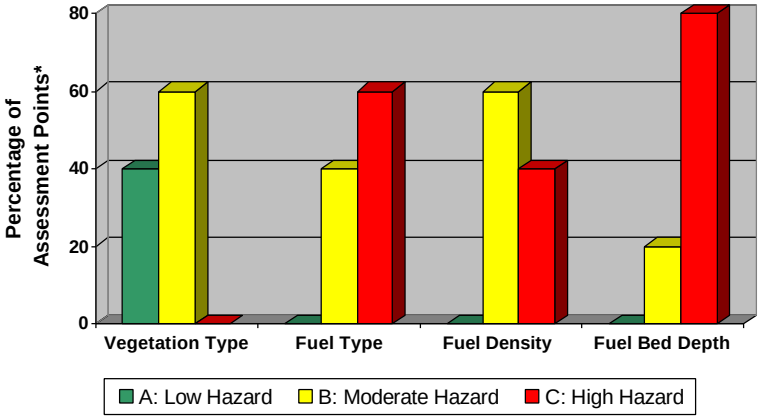
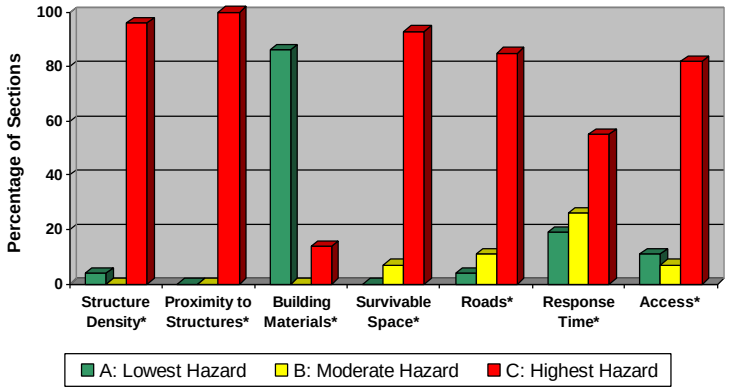


Figure 3: Idaho City Structure Risk Assessment Results



* Percentages based on 27 Sections surveyed within the assessment area.

5.0 SUGGESTED ACTIONS TO ACHIEVE A DESIRED CONDITION

Based on the interviews of community officials, discussions during the public meeting, and survey form responses, Dynamac ascertained that the community of Idaho City would like to see the following actions take place in the assessment area:

- Increase the cooperation among BLM, USFS, and Idaho Department of Lands, Idaho City, and local agencies on wildland fire issues.
- Increase the ability to control wildland fires by pre-positioning water sources at a specific location within the town.
- Reduce the build-up of fuels within the town and the assessment area.
- Construct shaded firebreaks where BLM land borders private land.
- Increase the knowledge and understanding of residents to proper firewise activities such as landscaping, use of fire resistant building materials, proper access roads, and emergency evacuation procedures, and public land uses.
- Reduce the amount of hazardous fuels in the assessment area.
- Maintain the natural vegetation cover and wildlife habitat on BLM and USFS land.
- Maintain the historic character of Idaho City.

6.0 NEED FOR ACTION

Wildfire occurrence in the Idaho City assessment area is common and results from both natural and human causes. The hazard of wildland fire is high because of the buildup of flammable fuels in many conifer forest stands and the closeness of fuels to structures. Both general and specific actions are needed to reduce the risk of wildland fire.

General action includes the adherence to firewise practices within the assessment area. The vegetation growing around structures needs to be maintained at an acceptable level. The firewise recommended distance for a survivable space is a 30-foot area around a home or structure that is properly landscaped with fire-resistant vegetation. Ways to keep the vegetation in compliance is through mechanical removal or herbicide treatments (limited use). However, there are numerous instances where large ponderosa pine and Douglasfir trees are growing close to structures. A professional arborist should carefully remove these trees or remove limbs that hang over structures or that are within 30 feet of the ground. Secondly, the town needs to clean up piles of lumber and other debris that occur around many structures. Improved firewise practices are

general but long-term in nature because they require continual adherence to reduce the hazard of wildfire.

Specific actions that are needed in the Idaho City assessment area include the reduction of flammable fuels in overstocked ponderosa pine stands and the creation of a firebreak between BLM land and private land. For example, prescribed fire and commercial tree thinning may be ways to reduce the buildup of hazardous fuels in ponderosa pine and mixed conifer stands as proposed by the USFS in the Warm Springs Ridge Vegetation Management Project. Creating shaded firebreaks between BLM land and private land would reduce the chances of wildfire from spreading from private to public land or from public to private land. The shaded firebreaks can be constructed by selectively removing understory trees and shrubs. In certain instances large trees may also need to be removed or limbs removed that are within 30 feet of the ground. The shaded firebreak should be visually appealing since private homes are in close proximity.

One additional action that will improve the wildfire fighting capability in the Idaho City assessment area is the construction of a 6,000-gallon water-storage tank at a strategic location within or close to the town. Open water is available in the assessment from Mores Creek and other surface sources. However, a water storage tank would ensure the availability of water when needed for fire emergencies and the fast turn around time in refilling tankers.

7.0 METHODOLOGY

The mitigation actions proposed herein for the Idaho City assessment area are based on information acquired from fuel and structure surveys, a public meeting, and interviews of community officials. The majority of information presented in this report was gathered during the time period of August 6-10, 2001.

The fire-hazard assessment area surrounding the community of Idaho City was defined by BLM. The BLM assigned 5 fuel survey points in the assessment area to be evaluated by Dynamac (Map 1). The fuel survey points occurred in sections where BLM land occurred. At each survey point, digital photographs were taken of the surrounding area in the four cardinal directions. Also, a fire hazard assessment was completed which rated the characteristic of the land features and fuel sources. The rating elements included slope, aspect, elevation, fuel type, fuel density, and fuel bed depth and were assigned a risk category of low, medium, or high as defined by BLM (see Hazard Assessment Report, Appendix B).

Dynamac staff also collected information on the flammability and defensibility of structures on private land from 27 sections located within one mile of public land within the assessment area. The structural hazard assessment rated the structures, building material and the distance of flammable fuels to the structures located within a section. The rating elements included structure density, proximity of flammable fuels to the structures, building materials, survivable space, types of roads, response times, and access. Each element was assigned a low, medium, or high hazard category defined by BLM (See Hazard Assessment Report, Appendix C).

A public meeting was convened on August 7, 2001, at the Idaho City High School in Idaho City from 6:00 to 9:00 p.m. The community was invited to attend through a newspaper article in the local paper and announcements posted in public places such as the grocery store, post office, restaurants and service stations. Also, the Student Conservation Association (SCA) went door-to-door to distribute fliers about the meeting. Dynamac, BLM, and SCA staff attended the public meeting to handout firewise brochures, obtain information from the community on hazardous fire situations and desired conditions, and be a resource to those attending the meeting.

A second public meeting was convened on November 15, 2001 to present the findings of the hazard assessment and discuss with the public potential mitigation actions that may reduce the risk of wildfire in the assessment area. A direct mailing was used to notify the residences of this meeting. The meeting was held at the High School from 7:00 to 9:00 p.m. Seven people attended the meeting in addition to BLM and Dynamac staff (see Hazard Assessment Report, Appendix F). The meeting participants were given a copy of the mitigation report and requested to provide comments on the report to either BLM or Dynamac Corporation within two weeks. The only comment in response to the meeting or proposed mitigation plan was that a Idaho City residence requested that the city ordinance on dead plants and landscaping be reviewed.

The Dynamac Community Relations Specialist conducted interviews with numerous local public officials and residents. Individuals or groups interviewed include the County planning and zoning department; various Forest Service personnel; the emergency management director; County Assessor; Fire Chief; Volunteer Battalion Chief; and Town Mayor (see Hazard Assessment Report, Appendix E).

8.0 PROPOSED PROJECTS AND PRIORITY

The proposed projects and their priority are based on information obtained from the fuel and structure surveys, community meeting, and interviews. The following specific action items in order of priority were identified to reduce the hazard of wildfire in the Idaho City assessment area:

- Reduce the buildup of hazardous fuels within Idaho City and the assessment area.
- Develop and maintain a water-storage tank within or close to Idaho City to provide a ready source of water for firefighting purposes.
- Develop an ongoing education and outreach program throughout the assessment area to encourage firewise practices, train the residents to use firefighting equipment, and assure everyone is familiar with the County Disaster Services evacuation plan. If no such plan exists, one should be developed.

The locations of the proposed fuel reduction projects, and firebreaks are illustrated on **Map 3**. These projects are proposed because of the impact they would have on reducing the hazard of wildland fire in the Idaho City assessment area. The fuel survey and visual examination of the assessment area demonstrated the widespread occurrence of overstocked ponderosa pine and mixed conifer stands. Numerous residents at the town meeting were in favor of reducing the buildup of hazardous fuels in the assessment area and the construction of firebreaks. Currently, the USFS and BLM are cooperating on the Warm Springs Ridge Vegetation Management Project. This project has a component to reduce the buildup of hazardous fuels through prescribed fires, commercial thinning and the construction of firebreaks between USFS land and private land (see **Map 4** for ongoing fuels mitigation projects in the area). The community's next priority is the establishment of a water storage tank within or close to Idaho City, to provide quick and reliable access to water for firefighting. Finally, the structure survey showed the lack of firewise practices associated with historic structures. Therefore, a public education and outreach program is warranted to inform and encourage specific actions that will reduce the chances of wildfire damaging their structures. The public outreach program received the lowest priority, not because of low importance, but because it is an ongoing need throughout the assessment area, while the other proposed actions are time and location sensitive. However, the public education and outreach program may, in the long run, prove to be the most effective in reducing wildland fire in the Idaho City assessment area.

8.1 Fuels Reduction and Firebreak Recommendations

Fuels Reduction and Firebreaks: The USFS and BLM are partners in a broad fuels reduction project known as the Warm Springs Ridge Vegetation Management Project, which includes the southern part of this assessment area. One of the objectives of the project is to conduct prescribed fire and commercially thin forest stands to reduce the build-up of hazardous fuels (Map 4). In addition, shaded firebreaks should be constructed at locations where USFS land is adjacent to private land. Currently, Section 23 (T06N R05E) is not part of the Warm Springs Ridge project. However, it may be desirable to include this section within the Warm Springs Ridge Vegetation Project. The BLM, USFS, and the private landowners may choose to enter into agreements to reduce the accumulation of hazardous fuels in this section. In addition, the BLM and private landowners, through a partnership, may choose to construct shaded firebreaks in Sections 23, 26, and 27 (T06N R05E), where BLM land is adjacent to private land (Map 3).

Type of Fuels Treatment: Prescribed fire and/or commercial thinning are proposed to reduce the amount of flammable vegetation in Section 23. The proposed treatment area is the 640 acres that comprise Section 23, of which approximately 320 acres is BLM land. The treatments could be implemented similarly and on the same timeframe as the Warm Springs Vegetation Management Project. Shaded firebreaks are areas where understory trees and large shrubs are removed to create an area relatively free of midlevel fuel. Grasses, forbs, and low-flammable shrubs may be left to control soil erosion. Certain trees may also be left in the firebreak for aesthetic appeal. Trees that are left in the firebreak should have limbs removed that are within 30 feet of the ground. The vegetation can be removed in the firebreaks by mechanical and/or limited herbicide treatments. Excessive vegetative litter (e.g., leaves, needles, small twigs) and detritus should also be mechanically removed. The firebreaks should be approximately 100 feet wide but may be wider depending on slope, topography, and the prevailing wind. Approximately 3.5, 0.75, and 1.0 miles of firebreaks are suggested in sections 23, 26, and 27, respectively.

Locations of Firebreaks and Fuel Treatments: Map 3 shows the locations of the proposed fuels reduction treatments and shaded firebreaks. Based on ownership, the BLM would be responsible for approximately 50 percent and the USFS and private landowners would be responsible for approximately 25 percent each for the fuels reduction treatments. An appropriate split of the cost between the BLM and private landowners may be reasonable for the construction of the firebreaks but this would depend on agreements reached in cooperating partnerships.

Project Timing: BLM generally times projects in the following manner: Year One is the year identification and justification of projects occurs, treatment objectives are determined, and field surveys begin. In Year Two, projects that require compliance with the National Environmental Policy Act (NEPA) are planned, analyzed, and designed. Projects that do not require NEPA compliance begin implementation. In Year Three, NEPA projects begin implementation. All steps are contingent on available funding. In Year Four, post-treatment monitoring begins. The firebreaks are high priority and should be initiated in spring 2002. Planning for the prescribed fire and tree thinning projects should be initiated in winter 2002 with actual implementation occurring in spring 2003. Both efforts will require considerable public input and cooperation, and the timing may depend on funding and clearances.

Project Necessity: The combination of firebreaks and fuel reduction has been shown to be effective around communities to reduce the risk of fire in the urban/wildland interface. A good assessment of specific hazards and threats to a community would help identify problems and solutions for both federal and private landowners, and offer opportunities for partnerships and agreements. The risk of wildland fire losses would be reduced for approximately 125 existing homes in the vicinity. Also, this area is popular for the construction of new homes, and several subdivisions are underway or planned.

8.2 Water Storage Facilities

Construction of Water Storage Facilities: The BLM and Idaho City, through a partnership, would be responsible for the establishment and maintenance of a proposed water storage tank. The proposed tank(s) would be established at strategic location(s) identified by the fire department of Idaho City.

Type of Water Storage Facility: The proposed water storage tank(s) would be at least 6,000 gallons in size and be properly equipped to fill tanker trucks at an acceptable rate.

Locations of Water Storage Facility: The locations of the proposed water storage tanks would be determined by the fire chief of Idaho City. The Forest Service fire squad could also be consulted in this decision. A partnership between BLM and Idaho City would be responsible for establishment of the tank.

Project Timing: Generally adhering to the timing guidelines set forth in Section 8.1, the water tank may be installed in spring 2002 or when funding and appropriate clearances are obtained.

Project Necessity: Readily available water sources have been shown to be effective in reducing the risk of wildland fire. A good assessment of specific hazards and threats to a community would help identify problems and solutions for both federal and private landowners, and offer opportunities for partnerships and agreements. Approximately 125 structures within Idaho City, and the proposed new subdivisions close by, would have reduced exposure to wildland fires.

8.3 Community Education and Outreach

Purpose of Public Education and Outreach: The purpose of the community-wide education program is to 1) educate the public of the dangers of wildfire in the area; 2) urge residents to take responsibility in reducing the risk of wildfire and to create defensible space around their residence; and 3) increase awareness of the natural role of low-intensity fire in woodland or grassland ecosystems and the benefits of prescribed burns or occasionally allowing woodlands or grasslands to burn. The public education and outreach program would be co-sponsored by the BLM and Idaho City through a partnership agreement.

Outreach Occurrence: An annual "Firewise Clean-Up Day" is one tool that is recommended to encourage residents to create defensible/survivable space around their residence. In conjunction with the Firewise Clean-Up Day, specific demonstration projects may be designed and utilized to educate residents about longer-term investments they could make to increase fire safety. The clean-up day would occur in conjunction with public demonstrations, education programs, and speakers on wildfire and firewise practices.

Outreach Timing: The annual "Firewise Clean-up Day", education program, and public demonstrations would probably be most effective in the spring to remind people to prepare their properties for the coming fire season.

Outreach Necessity: Citizen involvement in wildfire mitigation in and around communities is a necessary element for success. Public education and outreach is an effective means of engaging the public in the process of reducing risks to a community, can help identify problems and solutions for both federal and private landowners, and offer opportunities for partnerships and agreements. Such education and outreach has been shown to motivate homeowners to take

measures around their individual property, thereby contributing to the reduction of wildfire hazards in a community. Further, a community education and outreach program would help identify problems and solutions for both federal and private landowners, and offer opportunities for partnerships and agreements.

9.0 POTENTIAL SOURCES OF STATE FUNDING

Idaho Department of Lands representative Kurt Houston, who is based out of IDL's Boise office, provided the following information. Communities-at-Risk may benefit from these State-administered grant programs, which provide financial assistance for various types of fire safety-, fire suppression- and fire education-related projects, as well as stewardship activities.

Idaho Fire Assistance Program: A cost-share program designed to assist fire service organizations with organizing, training, and purchasing equipment for fire protection and suppression. Open application period is from May 1 through June 15 each year. Contact Fire Warden Kurt Houston at the Idaho Department of Lands office in Boise at (208) 334-3488 for more information and applications.

Volunteer Fire Assistance Program: A cost-share program with federal funds administered by the State of Idaho. The rural community must have a population of less than 10,000. Only those projects to organize, train, and equip fire service organizations qualify for financial assistance. Open application period is from October 1 through December 31 each year. Contact Fire Warden Kurt Houston at the Idaho Department of Lands office in Boise at (208) 334-3488 for more information and applications.

Federal Excess Personal Property Program: An equipment loaning program for fire service organizations with populations less than 10,000 residents. Usable fire related equipment is loaned to the organization until such time the organization no longer wants it. Titles for vehicles remain with the federal government. Applications are continuously accepted. Contact Fire Warden Kurt Houston at the Idaho Department of Lands office in Boise at (208) 334-3488 for more information and applications.

Forest Incentive Program: Federal cost-share funds administered by the Natural Resources Conservation Service (NRCS). The Forestry Incentives Program (FIP) supports good forest management practices on privately owned, non-industrial forest lands nationwide. FIP is

designed to benefit the environment while meeting future demands for wood products. Eligible practices are tree planting, timber stand improvement, site preparation for natural regeneration, and other related activities. FIP is available in counties designated by a Forest Service survey of eligible private timber acreage. Depending on funding, the open application period varies. Contact the nearest NRCS or Tim Kennedy at the Boise IDL for more information and applications. Additional information on the program and NCRS contacts is available at http://id.nrcs.usda.gov/programs.htm.

Stewardship Incentive Program: Federal cost-share funds administered by the NRCS. The Stewardship Incentive Program provides technical and financial assistance to encourage non-industrial private forest landowners to keep their lands and natural resources productive and healthy. Qualifying land includes rural lands with existing tree cover or land suitable for growing trees and which is owned by a private individual, group, association, corporation, Indian tribe, or other legal private entity. Eligible landowners must have an approved Forest Stewardship Plan and own 1,000 or fewer acres of qualifying land. Authorizations may be obtained for exceptions of up to 5,000 acres. Depending on funding, the open application period varies. Contact the nearest NRCS or Tim Kennedy at the Boise IDL for more information and applications. Additional information on the program and NCRS contacts is available at http://id.nrcs.usda.gov/programs.htm.

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Video: Firewise Landscaping, Part 1-Overview.

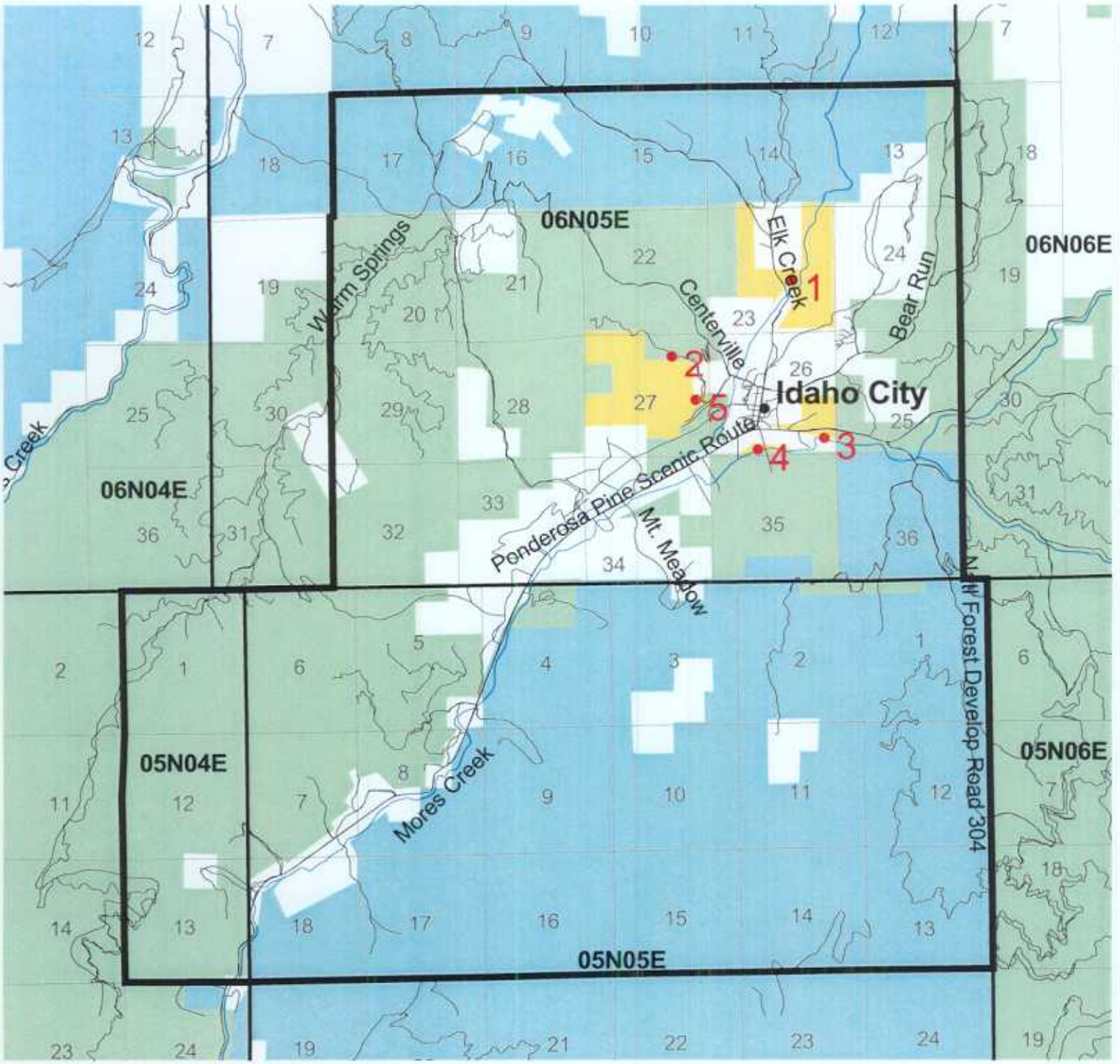
Video: Firewise Landscaping, Part 2-Design and Installation.

Video: Firewise Landscaping, Part 3-Maintenance.

Video: Wildfire Control--An Introduction for Rural and Volunteer Fire Departments.

Video: The Meeting: Fire Protection Planning in the Wildland/Urban Interface (1991).

Appendix: Maps



Map 1: Idaho City Assessment Area and Fuel Survey Points

Date: December 2001

Scale:

1 0 1 Miles

N
W E
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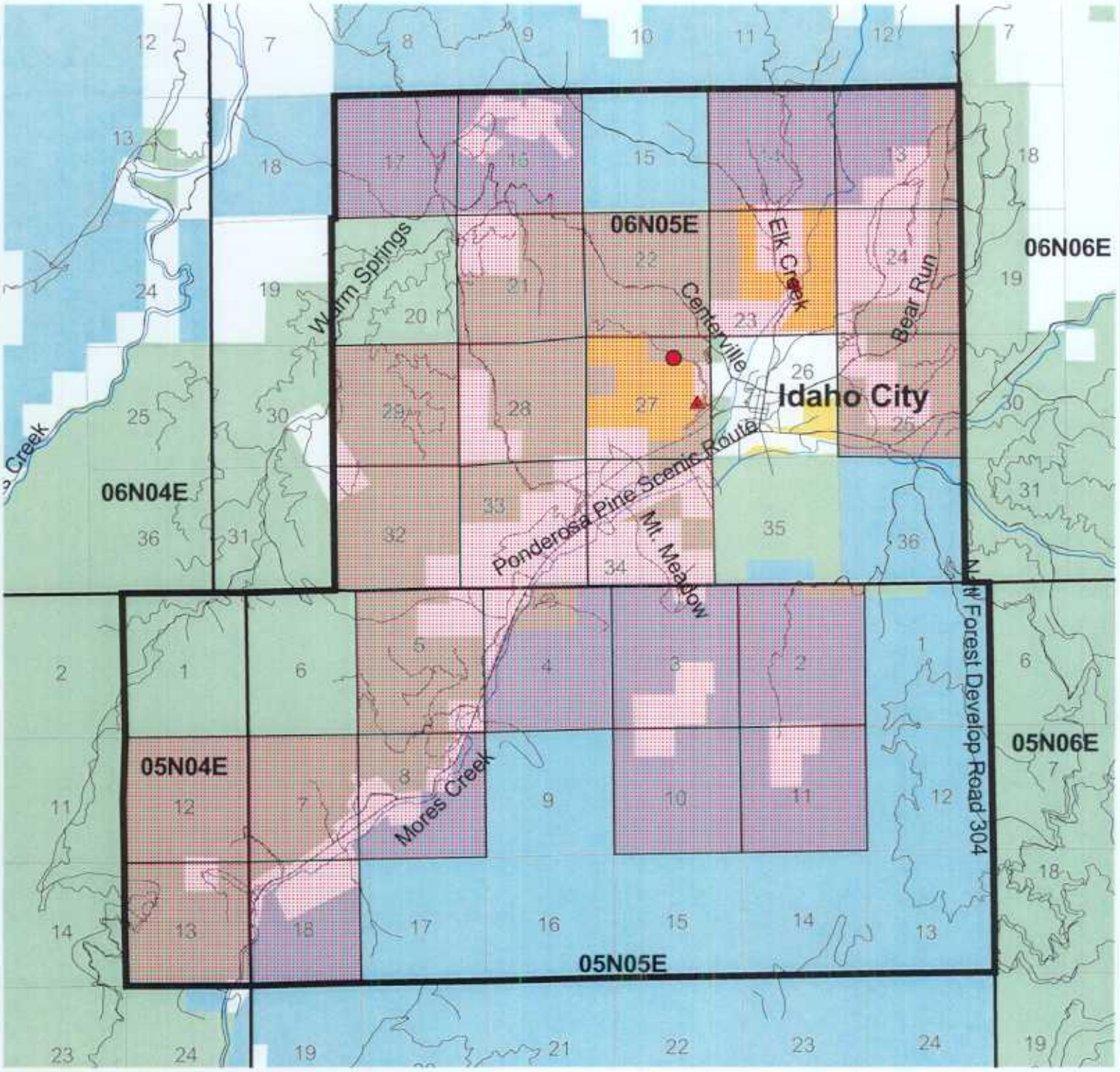
DYNAMAC CORPORATION
Environmental Services

Legend:

- Assessment Area
- Actual Assessment Point
- Road
- Stream

Ownership:

- Private
- BLM
- State of Idaho
- US Forest Service



Map 2: Highest Risk Areas for Fuel and Fire Supression within the Idaho City Assessment Area

Date: December 2001

Scale:

1 0 1 Miles

N W E S

DYNAMAC CORPORATION
Environmental Services

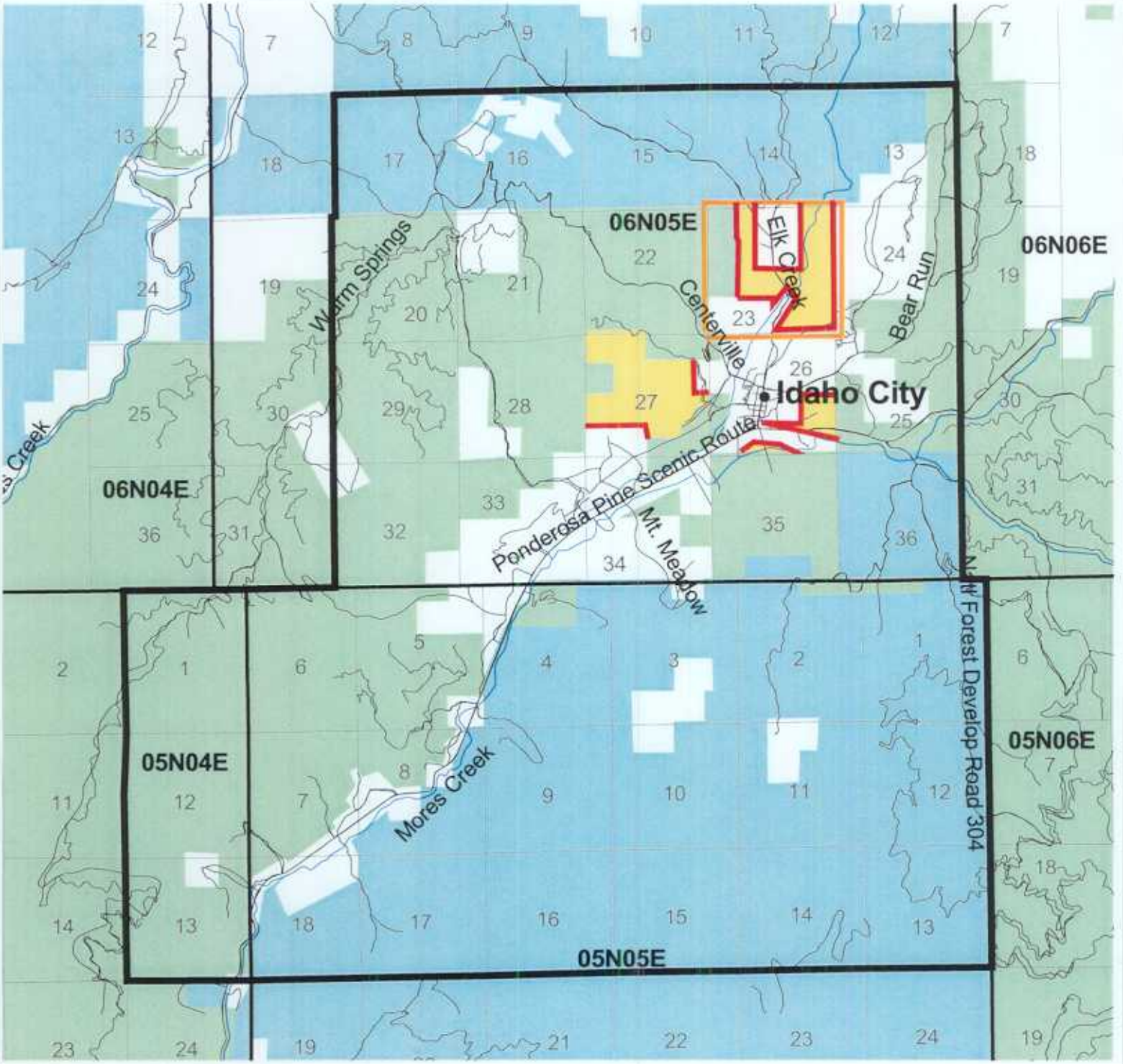
Legend:

- Assessment Area
- Road
- Stream

Ownership:

- Private
- BLM
- State of Idaho
- US Forest Service

- Highest Risk Fire Supression Areas (Low Structure Density) within the Assessment Area
- Highest Risk Fuel Area within the Assessment Area
- High Risk Fuel Area within the Assessment Area



Map 3: Proposed Mitigation Projects in the Idaho City Assessment Area

Date: December 2001

Scale:

1 0 1 Miles

N W E S

DYNAMAC CORPORATION
Environmental Services

Legend:

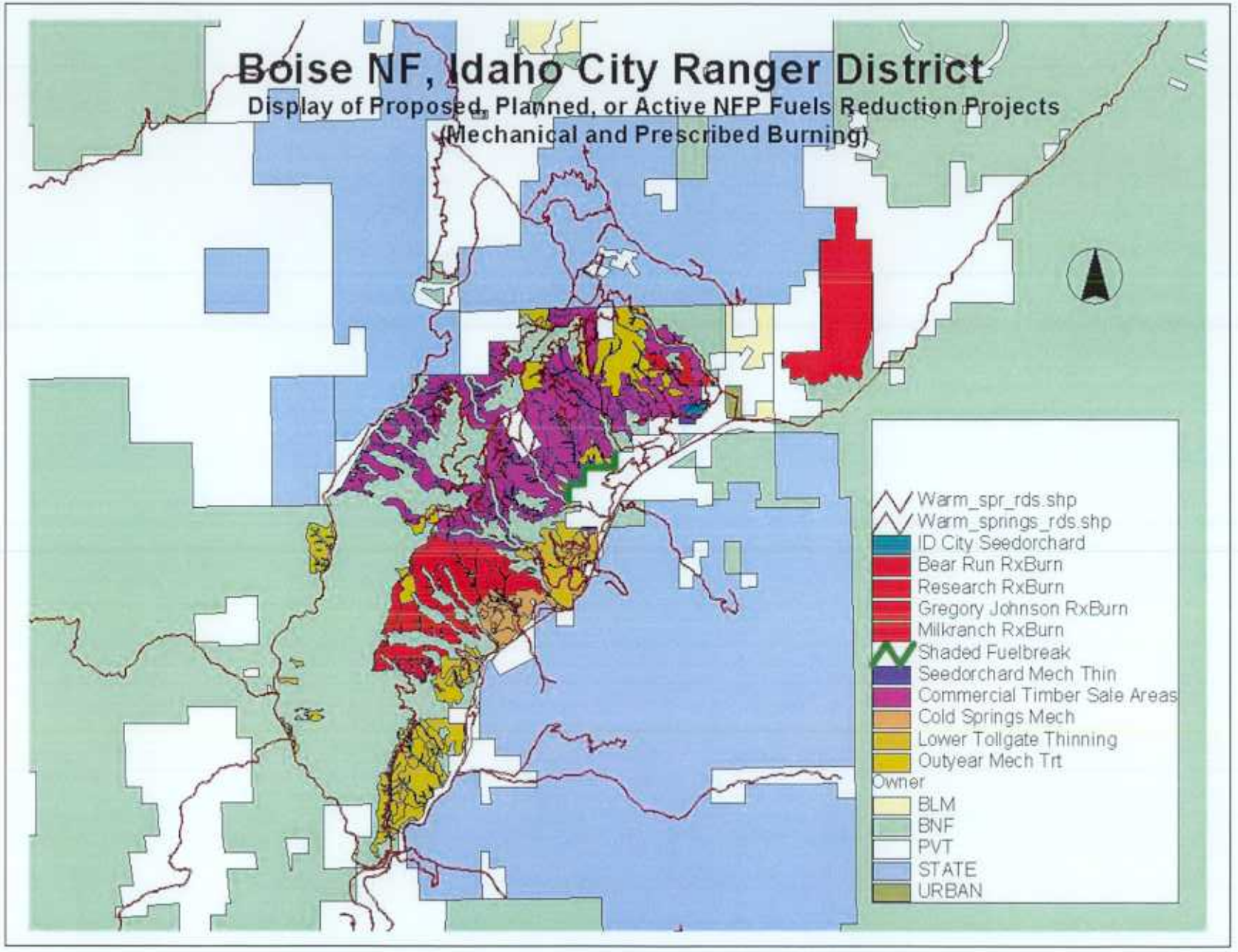
- Assessment Area
- Road
- Stream

Ownership:

- Private
- BLM
- State of Idaho
- US Forest Service

Mitigation:

- Proposed Fuel Reduction Treatments
- Proposed Shaded Fire Breaks



Map 4: Ongoing Fuels Mitigation Projects in the Idaho City Area
(Map Courtesy of U.S. Forest Service, Boise National Forest)